



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

## NOTICE OF ALLOWANCE AND FEE(S) DUE

8968 7590 08/11/2008

DRINKER BIDDLE & REATH LLP  
ATTN: PATENT DOCKET DEPT.  
191 N. WACKER DRIVE, SUITE 3700  
CHICAGO, IL 60606

EXAMINER

GODBOLD, DOUGLAS

ART UNIT

PAPER NUMBER

2626

DATE MAILED: 08/11/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/541,340

07/01/2005

Balazs Kovesi

P1912US

7755

TITLE OF INVENTION: METHOD FOR ENCODING AND DECODING AUDIO AT A VARIABLE RATE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	11/12/2008

**THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.**

**THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.**

### HOW TO REPLY TO THIS NOTICE:

#### I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.**

# **PART B - FEE(S) TRANSMITTAL**

**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
or Fax (571)-273-2885**

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

8968 7590 08/11/2008  
**DRINKER BIDDLE & REATH LLP**  
ATTN: PATENT DOCKET DEPT.  
191 N. WACKER DRIVE, SUITE 3700  
CHICAGO, IL 60606

## **Certificate of Mailing or Transmission**

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/541,340	07/01/2005	Balazs Kovesi	P1912US	7755

TITLE OF INVENTION: METHOD FOR ENCODING AND DECODING AUDIO AT A VARIABLE RATE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	11/12/2008

EXAMINER	ART UNIT	CLASS-SUBCLASS
GODBOLD, DOUGLAS	2626	704-201000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 \_\_\_\_\_
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 \_\_\_\_\_
- 3 \_\_\_\_\_

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies \_\_\_\_\_

4b. Payment of Fee(s); (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_

Date \_\_\_\_\_

Typed or printed name \_\_\_\_\_

Registration No. \_\_\_\_\_

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/541,340

07/01/2005

Balazs Kovesi

P1912US

7755

8968

7590

08/11/2008

DRINKER BIDDLE & REATH LLP  
ATTN: PATENT DOCKET DEPT.  
191 N. WACKER DRIVE, SUITE 3700  
CHICAGO, IL 60606

EXAMINER

GODBOLD, DOUGLAS

ART UNIT

PAPER NUMBER

2626

DATE MAILED: 08/11/2008

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 550 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 550 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

# Notice of Allowability

Application No.

10/541,340

Examiner

DOUGLAS C. GODBOLD

Applicant(s)

KOVESI ET AL.

Art Unit

2626

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 28, May 2008.
2. ☒ The allowed claim(s) is/are 1-38.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

### **DETAILED ACTION**

1. This Office Action is in response to correspondence filed May 28, 2008 in reference to application 10/541,340. Claims 1-38 are pending in the application and have been examined

#### ***Response to Amendment***

2. The amendments filed May, 28, 2008 have been accepted and considered in this office action. Claims 1, 15, 16, 32, 35, 36 have been amended and claims 37 and 38 have been added.

#### ***Response to Arguments***

3. Applicant's arguments, see Remarks, filed May 28, 2008, with respect to claims 1-38 have been fully considered and are persuasive. The rejections of claims 1-38 has been withdrawn.

#### ***Allowable Subject Matter***

4. Claims 1-38 are allowed.

5. The following is an examiner's statement of reasons for allowance:

6. Regarding claim 1, the prior art of record, Koh (US Patent 4,949,383), Grill ( US Patent 6,370,507), Chiu (US PAP 2005010395) and Park (US Patent 6,016,111), does not specifically teach alone or in a reasonable combination the limitations:

"ranking the  $N_{\max}$  - NO coding bits allocated to the parameters of the second subset in a determined order, in which at least one of the allocation and [[/or]] the order of ranking of the  $N_{\max}$  - NO coding bits is determined as a function of the coded parameters of the first subset, the method furthermore comprising the following steps in response to the indication of a number  $N$  of bits of the binary output sequence that are available for the coding of said set of parameters, with  $N \leq N_{\max}$ :

selecting the second subset's parameters to which are allocated the  $N$  - NO coding bits ranked first in said order;

calculating the selected parameters of the second subset, and coding these parameters so as to produce said  $N$  - NO coding bits ranked first; and

inserting into the output sequence the NO coding bits of the first subset as well as the  $N$  - NO coding bits of the selected parameters of the second subset" when combined with all preceding limitations of the claim.

Koh is directed towards a coder, in which a fixed available bits are distributed among different sub-bands of a signal. Although the coding of one subband [ $2^{\text{nd}}$  parameter] is dependent on the coding of another subband [ $1^{\text{st}}$  parameter]; this algorithm does not allow for the granular scalability of the present invention.

Grill discloses a scalable audio coder, however, the scalability of Grill is not fine-granular, meaning that there are several fixed bitrates available for coding, i.e., the bitrates cannot be adjusted on a bit by bit level.

Park introduces the concept of Bit slicing in order to allow for the fine scale granularity scaling where the  $N$  most important bits are coded and sent. However,

missing from the disclosure of park is "ranking the Nmax - NO coding bits allocated to the parameters of the second subset in a determined order, in which at least one of the allocation and [[/or]] the order of ranking of the Nmax - NO coding bits is determined as a function of the coded parameters of the first subset." There is no base data [first parameter] that affects the ranking of the bits in an enhancement data.

Chiu introduces scaling subband in order to effect the prioritization of the bit slicing algorithm. However, these are not based on already coded first parameters [base layer]. Instead it is based on psychoacoustic determinations such as masking and thresholds of hearing.

Therefore claim 1 is allowable over the prior art of records

7. Claims 2-15, and 37 are allowable as the are dependent on and further limit claim 1.

8. Regarding claim 16, the prior art of record does not teach or suggest the similar limitations to those of claim 1:

"ranking the Nmax - NO coding bits allocated to the parameters of the second subset in a determined order,

in which at least one of the allocation and [[/or]] the order of ranking of the Nmax - NO coding bits is determined as a function of the recovered parameters of the first subset,

the method furthermore comprising the following steps:

selecting the second subset's parameters to which are allocated the  $N'$  - NO coding bits ranked first in said order; extracting, from said  $N'$  bits of the input sequence,  $N'$  - NO coding bits of the selected parameters of the second subset;

recovering the selected parameters of the second subset on the basis of said  $N'$  - NO coding bits extracted; and

synthesizing the signal frame by using the recovered parameters of the first and second subsets.”

Therefore claim 16 is allowable for similar reasons as claim 1.

9. Claims 17-34, and 38 are allowable as they are dependent on and further limit claim 16

10. Regarding claim 35, the prior art of record does not teach or suggest the similar limitations to those of claim 1:

ranking the  $N_{\max}$  - NO coding bits allocated to the parameters of the second subset in a determined order,

in which at least one of the allocation and  $[[/or]]$  the order of ranking of the  $N_{\max}$  - NO coding bits is determined as a function of the coded parameters of the first subset,

the method furthermore comprising the following steps in response to the indication of a number  $N$  of bits of the binary output sequence that are available for the coding of said set of parameters, with NO  $N$   $N_{\max}$ :

selecting the second subset's parameters to which are allocated the N - NO coding bits ranked first in said order;

calculating the selected parameters of the second subset, and coding these parameters so as to produce said N - NO coding bits ranked first; and

inserting into the output sequence the NO coding bits of the first subset as well as the N - NO coding bits of the selected parameters of the second subset.

Therefore claim 35 is allowable for similar reasons as claim 1.

11. Regarding claim 36, the prior art of record does not teach or suggest the limitations that are the direct inverse of those of claim 35, which is inherent in a decoder:

ranking the Nmax - NO coding bits allocated to the parameters of the second subset in a determined order,

in which at least one of the allocation and [[/or]] the order of ranking of the Nmax - NO coding bits is determined as a function of the recovered parameters of the first subset,

the method furthermore comprising the following steps:

selecting the second subset's parameters to which are allocated the N' - NO coding bits ranked first in said order;

extracting, from said N' bits of the input sequence, N' - NO coding bits of the selected parameters of the second subset;

recovering the selected parameters of the second subset on the basis of said N' - NO coding bits extracted; and

synthesizing the signal frame by using the recovered parameters of the first and second subsets.

Therefore claim 36 is allowable for similar reasons as claim 35.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DOUGLAS C. GODBOLD whose telephone number is (571)270-1451. The examiner can normally be reached on Monday-Thursday 7:00am-4:30pm Friday 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

8/7/2008

/Talivaldis Ivars Smits/  
Primary Examiner, Art Unit 2626

DCG